15

25

30

Patent claims

- 1. Mixture containing
- 5 A) vinylcyclohexane-based polymer and
 - B) stabiliser system containing lactone, sterically hindered phenol and phosphite compound.
- Mixture according to claim 1, containing 0.001 to 2 wt.% (based on the polymer used) of stabiliser system B.
 - 3. Mixture according to claim 1, containing 0.005 to 1 wt.% of stabiliser system B.
 - 4. Mixture according to claim 1 to 3, containing as stabiliser system the following compounds:

lactone corresponding to formula (I)

$$(1) R^{\frac{1}{2}} \longrightarrow R^{3}$$

$$(1) R^{\frac{1}{2}} \longrightarrow R^{4}$$

wherein

R¹, R², R³ and R⁴, independently of each other, represent hydrogen, C₁-C₆-alkyl, or a 5 or 6-membered ring alkyl,

sterically hindered phenol corresponding to formula (II)

wherein

10

5

R⁵ and R⁶, independently of each other, represent hydrogen or C₁-C₆-alkyl, a 5 or 6-membered ring,

15

n represents an integer from 1 to 4, and

R, independently, represents hydrogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, a 5 or 6-membered ring,

phosphite component corresponding to formula (III)

20

$$\begin{array}{c|c}
 & (R^8)_x \\
 & (R^7)_y
\end{array}$$
(III)

25

wherein

 R^7 and R^8 , independently of each other, represents hydrogen, C_1 - C_6 -alkyl, also as a 5 or 6-membered ring or as branched alkyl, and

30

x and y, independently of each other, represent 0, 1, 2, 3, 4, 5, and

10

15

20

25

30

n represents 1 or 2, wherein if n = 1 the free valence bond of the carbon atom is attached to hydrogen, C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy or to 5,6 rings.

5 Mixture according to one or more of the preceding claims, containing the following compounds:

$$\begin{array}{c|c}
 & CH_2CH_2 - COCH_2 - COCH_2$$

6. Mixture according to one or more of the preceding claims, wherein the stabiliser system contains

5 to 95 parts by wt. (based on component B) of compound(s) corresponding to formula I

5 to 95 parts by wt. (based on component B) of compound(s) corresponding to formula II

5 to 95 parts by wt. (based on component B) of compound(s) corresponding to formula III.